

WHAT IS CLAIMED IS:

1. A gel electrolyte secondary cell comprising a positive electrode, a negative electrode and a gel electrolyte, wherein
said negative electrode contains a graphitized carbonaceous material obtained on firing meso-carbon micro-beads.
2. The gel electrolyte secondary cell according to claim 1 wherein the gel electrolyte comprises a non-aqueous liquid electrolyte containing a non-aqueous solvent and an electrolyte salt and a high-molecular material having a nitrile group in its side chain.
3. The gel electrolyte secondary cell according to claim 1 wherein the high-molecular material having a nitrile group in its side chain is polyacrylonitrile.
4. The gel electrolyte secondary cell according to claim 1 wherein the high-molecular material having a nitrile group in its side chain is polyacrylonitrile and wherein the molar ratio of the acrylonitrile monomer to the non-aqueous solvent is ^{5.95}~~5.95~~ to 30:70.
5. The gel electrolyte secondary cell according to claim 4 wherein the non-aqueous solvent of the non-aqueous liquid electrolyte contains at least propylene carbonate and ethylene carbonate and wherein propylene carbonate has a proportion of 10 mol% to 75 mol%.
6. The gel electrolyte secondary cell according to claim 5 wherein the non-aqueous solvent of the non-aqueous liquid electrolyte contains at least one selected from the group of γ -butyrolactone, methyl ethyl carbonate and dimethyl carbonate in addition to propylene carbonate and ethylene carbonate.
7. The gel electrolyte secondary cell according to claim 2 wherein the electrolyte salt

of the non-aqueous solvent is LiPF_6 and wherein the concentration of this LiPF_6 with respect to non-aqueous solvent is 0.4 to 2 mol/cm³.

8. The gel electrolyte secondary cell according to claim 1 wherein the positive electrode contains a lithium-containing compound.

9. The gel electrolyte secondary cell according to claim 8 wherein the lithium-containing compound is a complex compound of lithium and a transition metal.

10. The gel electrolyte secondary cell according to claim 8 wherein the specific surface area as measured by the BET method of the graphitized carbonaceous material obtained on firing meso-carbon micro-beads is 0.1 to 10 m²/g.

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